

EDWARD BURGESS.

The death of Mr. Edward Burgess of Boston on July 12 at the age of 43 removed one of the few persons in America who have made important contributions to insect anatomy.

His work was not voluminous but it was very careful and exact. As president of this Club he gave in 1880 an excellent review of the then recent literature in insect anatomy and physiology. His own most important and extensive paper was on the anatomy of the milk weed butterfly, but he worked out in more or less detail the anatomy of the perfect stage in *Anabrus* and *Aletia* and studied minutely the male abdominal appendages of butterflies, the structure of the head of *Psocidae*, the mouth parts of the larva of *Dytiscus* and the varied course of the aorta in *Lepidoptera*. He was also the first to show the precise structure and working of the apparatus for feeding in the imago of *Lepidoptera*.

A large part of his work was in aid of the researches of others, in which he was generous almost to a fault, and his unselfish devotion to his duties for sixteen years as secretary of the Boston society of natural history, in whose publications most of his papers were issued, brought the office to a high state of efficiency—a devotion further signalized in his will, in which he made the society his contingent residuary legatee. Besides, although he published but a single short paper on *Diptera*, his knowledge of this group, in which he rendered large service to others, was unsurpassed among our countrymen.

To entomology, which he had cultivated with such signal success, Mr. Burgess, it is true, died several years ago when he parted from his collection and library and turned his attention exclusively to naval architecture in which he had been interested from boyhood and which offered far more promise of financial returns, then first absolutely necessary

for him to consider. His world-known success in his new field (for he fairly leaped into fame) it is not the place here to consider, but, clearly the greatest genius our country has ever produced in this branch of science, his naturalist friends without exception will agree that in losing him from their immediate ranks Science at large has been the gainer; they were indeed eager to applaud his success, his old scientific friends being, we believe, the very first to give him a tangible proof of their pride in his fellowship—a pride all the greater for the almost painful modesty with which he received every mark of his growing fame. Selfishness could not live in his sight. When the city of Boston gave him a public reception, his shrinking boyish figure as he rose to return his thanks, in which he tried to turn public attention rather to the one whose means, whose confidence and whose sympathy had rendered the realization of his scientific genius practically possible, will not soon be forgotten by those who witnessed it. But the gentleness and sincerity of his character, the refinement of his life and manners, his truthfulness and loyalty, and all those other delicate traits which revealed his heart and rendered him so dear to his intimate friends will remain to them a source of perennial inspiration.

 THE LONDON INSECTARY.

The following extract from a recent number of *Nature* shows that America is largely drawn upon for interesting insects in the display at the insect-house of the Zoological Society of London, and yet no special mention is made of our large and striking *Bombycidae*. It suggests that when the contemplated natural history gardens in Boston are fairly established, we can easily rival any exhibitions of this nature now existing.

“The insect-house in the Zoological Society’s Gardens is now in excellent order,

and well deserves a visit. In addition to the silk-moths that are usually present during the warm weather, the Papilioninae, or swallow-tail butterflies, afford at the present time the chief display. The perfect insects of several species of the genus *Papilio* have appeared—*P. cresphontes*, *ajax*, and *asterias* from North America, *P. alexanor* from the Mediterranean shores, and the handsome *P. maackii* from Japan. The last named has been seen for the first time in the house this year, and offers a striking contrast to the other species of the genus that have previously been exhibited in the Gardens, it being of black and golden-green colours instead of the yellows and blacks that we are accustomed to in our European swallow-tails. *P. cresphontes* has appeared in large numbers in the house, but no varieties have been obtained. This also is the first season for two other beautiful Papilioninae, viz. *Doritis apollina* from Asia Minor, and the Japanese *Sericina telamon*. The latter shows considerable difference in the markings of the sexes. The North American *Limenitis disippus* can be at present seen in all its stages, and is well worthy of attention, the caterpillar moving along the leaf-stalks with a peculiar interrupted gait. Of the sphinx moths, the south European *Deilephila alecto* has already appeared, and *D. nicae* is expected. These insects are, however, not seen to advantage in confinement, as their superb powers of flight cannot be displayed in a small compartment. Two examples of the Orthoptera are alive in the house—*Diaphchromera femorata*, one of the stick- or twig-insects from North America, and *Empusa egea* from southern Europe. The former has been reared from eggs laid in the insect-house, but these progeny are not so healthy as those obtained from freshly-imported eggs. The *Empusa* is of a most bizarre form, and belongs to the family Mantidae, the species of which feed only on living creatures. The public is indebted to Mr. S. H. Carver for the opportunity of seeing

living scorpions; he has sent examples of two species of this group from Egypt, both of which unfortunately are unidentified, there being obvious difficulties in the way of carrying about live scorpions and comparing them with dried specimens. There is a third scorpion, from south Europe, living with its Egyptian congeners; it has a small delicate tail, and is altogether a less frightful creature, though assuming a menacing attitude with equal readiness. A spider, *Lycosa portosantana*, from Madeira, is healthy, and is a fine creature, though insignificant by the side of its neighbour, a huge *Mygale* from South America. The latter, as well as the scorpions, is fed with mice, which are given to it dead, though in its native haunts a *Mygale* has been known to prey on living individuals of these small mammals."

RECENT ENTOMOLOGICAL LITERATURE.

The first number of the 18th volume of the Transactions of the American entomological society contains convenient analytical tables to the genera of Coccidae by Ashmead, as well as a catalogue of the described South American Asilidae by Williston; one is rather surprised to see *Dasygogon* figuring in three different places. A monograph of the species of *Cryptohypnus* found in boreal America by Horn will be welcomed by the coleopterist; it includes thirty species and they are divided into nine groups containing from one to seven species each. Other papers are less important. If the society would print a table of contents to each number on the vacant fourth page of the cover it would be very welcome, especially as the head-lines of the pages are not very distinctive.

The issue of Insect life for June is a double one and therefore makes even a better showing than usual. This journal has now certainly justified its publication, though grave doubts have been expressed as to the province of the government in the issue of a periodical, and it may still be questioned